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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/444,166	11/22/1999	YOSHIMASA HOSONUMA	13167	8299

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GARDEN CITY, NY 11530

EXAMINER

SHARMA, SUJATHA R

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 05/08/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/444,166

Applicant(s)

HOSONUMA, YOSHIMASA

Examiner

Sujatha Sharma

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2003.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7-9,11,13-15 and 17 is/are rejected.
- 7) ☒ Claim(s) 4,6,10,12,16 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

The examiner is withdrawing the finality of the previous office action on grounds of newly found prior art. A non-final rejection of the claims is presented in the enclosed office action.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1-3,5,7 is rejected under 35 U.S.C. 102(b) as being anticipated by Eda [5,387,888].

Regarding claims 1,7,13, Eda discloses a high frequency ceramic multiplayer substrate. Eda discloses a flexible board comprising of an internal layer comprising of a line formed in a first area of the said internal layer (1, 2, 2' in Fig.1), a first ground layer formed on the upper surface of the said internal layer (3 in Fig.1) and a second ground layer formed on a lower surface of said internal layer (4 in Fig.1) and the ground layers disallowing the radiation to pass through (See summary of invention and column 1, lines 28-38, column 9, lines 59-63).

Regarding claims 2,8,14 Eda as treated in claim 1 discloses a high frequency multi-layer substrate such as used in cellular telephones comprising of 2 ground electrodes, one on the top and the other at the bottom of the dielectric layer and hence is inherent that the top cover for the electronic device is formed over the first ground layer on top and the bottom cover is formed over the second ground layer at the bottom.

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Regarding claim 3,9,15 it is inherent for the flexible board formed by the multi-layer substrate to use adhesive layers between the various layers in order to hold the multi-layer substrate together.

Regarding claims 5,11,17 Eda discloses via holes connecting the ground layers with the internal layer thus connecting the first ground layer and the second ground layer (See summary of invention).

***Allowable Subject Matter***

3. Claims 4,6,10,12,16 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reason for the indication of allowable subject matter:

5. Prior art fails to disclose a ground line formed in a second area except said first area in said internal layer and wherein plurality of through holes is formed throughout said first ground layer, said ground line and said second ground layer, said through holes electrically connecting said first ground layer, said ground line and said second ground layer to one another.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tonegawa [US 6,252,778] discloses a complex electronic component.

Onishi [US 5,459,368] discloses a surface acoustic wave device mounted module.


Yoshikawa [US 5,796,165] discloses a high-frequency integrated circuit device having a multi-layer structure.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sujatha Sharma whose telephone number is 703-305-5298. The examiner can normally be reached on Mon-Fri 7.30am - 4.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on 703-305-4778. The fax phone numbers for the organization where this application or proceeding is assigned and for all official communications is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800.

  
Sujatha Sharma  
May 2, 2003

JEAN GELIN  
PATENT EXAMINER

